

68. (New) The nucleic acid sequence of claim 67, wherein the purified nucleic acid segment comprises the nucleic acid sequence of SEQ ID NO: 1.--

REMARKS

The specification has been amended to claim priority to copending Application Serial No. 09/275,506, filed March 24, 1999, which is a divisional application of prior U.S. Application 08/437,013 filed on May 8, 1995, now issued as U.S. Patent No. 5,932,220, to cancel claims 1-36 without prejudice or disclaimer and to add new claims 37-68. A copy of the currently pending claims is attached as Appendix A. Support for the current claims can be found in the claims as originally filed and throughout the specification. See for example, page 5, lines 32-34; page 6, lines 17-22; page 7, lines 18-27 and lines 30-35; page 8 lines 1-3; page 10, lines 38-39; page 11, lines 21-33; Table 2, pages 12-15; page 16, lines 27-30; page 19, lines 17-19; page 21, lines 17-26; page 22, lines 18-33 to page 23, lines 1-24; page 40, lines 4-17; page 41, lines 9-11 and lines 26-27; page 42, lines 4-8.

Should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required, the Commissioner is hereby authorized to deduct said fees from Fulbright & Jaworski L.L.P. Deposit Account No. 50-1212/UTSK:352USC1/MRK.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael R. Krawzsenek". The signature is fluid and cursive, with the first name "Michael" being the most prominent part.

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APPENDIX A
Currently Pending Claims

37. A purified nucleic acid segment comprising a nucleotide sequence of at least 14 contiguous nucleotides of SEQ ID NO: 1, or its complement.
38. The purified nucleic acid segment of claim 37, wherein the purified nucleic acid segment comprises at least 15 contiguous nucleotides of SEQ ID NO: 1, or its complement.
39. The purified nucleic acid segment of claim 38, wherein the purified nucleic acid segment comprises at least 20 contiguous nucleotides of SEQ ID NO: 1, or its complement.
40. The purified nucleic acid segment of claim 39, wherein the purified nucleic acid segment comprises at least 30 contiguous nucleotides of SEQ ID NO: 1, or its complement.
41. The purified nucleic acid segment of claim 40, wherein the purified nucleic acid segment comprises at least 50 contiguous nucleotides of SEQ ID NO: 1, or its complement.
42. The purified nucleic acid segment of claim 41, wherein the purified nucleic acid segment comprises at least 100 contiguous nucleotides of SEQ ID NO: 1, or its complement.
43. The purified nucleic acid segment of claim 42, wherein the purified nucleic acid segment comprises at least 200 contiguous nucleotides of SEQ ID NO: 1, or its complement.
44. The purified nucleic acid segment of claim 43, wherein the purified nucleic acid segment comprises at least 400 contiguous nucleotides of SEQ ID NO: 1, or its complement.
45. The purified nucleic acid segment of claim 44, wherein the purified nucleic acid segment comprises the nucleotide sequence of SEQ ID NO: 1, or its complement.

46. The purified nucleic acid segment of claim 37, wherein the purified nucleic acid segment comprises at least one *B. lonestari* sp. nov.-specific nucleotide selected from the group consisting of G70, G96, T141, A193, G199, G228, A231, T269, C270, T271, A273, A300, T308, G315, A376, G380, A406, G418, G423, G505, A510, G546, T572, and C603, or its complement.
47. The purified nucleic acid segment of claim 37, wherein the purified nucleic acid segment comprises the nucleotide sequence of SEQ ID NO: 7, or its complement.
48. The purified nucleic acid segment of claim 37, wherein the purified nucleic acid segment comprises the nucleotide sequence of SEQ ID NO: 8, or its complement.
49. The purified nucleic acid segment of claim 37, wherein the purified nucleic acid segment encodes a polypeptide comprising the amino acid sequence of SEQ ID NO: 2, or its complement.
50. An expression vector comprising a nucleic acid segment operably attached to a promoter, wherein the nucleic acid segment comprises at least 14 contiguous nucleotides of SEQ ID NO: 1, or its complement.
51. The expression vector of claim 50, wherein the purified nucleic acid segment comprises at least 15 contiguous nucleotides of SEQ ID NO: 1, or its complement.
52. The expression vector of claim 51, wherein the purified nucleic acid segment comprises at least 20 contiguous nucleotides of SEQ ID NO: 1, or its complement.
53. The expression vector of claim 52, wherein the purified nucleic acid segment comprises at least 30 contiguous nucleotides of SEQ ID NO: 1, or its complement.

54. The expression vector of claim 53, wherein the purified nucleic acid segment comprises at least 50 contiguous nucleotides of SEQ ID NO: 1, or its complement.
55. The expression vector of claim 54, wherein the purified nucleic acid segment comprises at least 100 contiguous nucleotides of SEQ ID NO: 1, or its complement.
56. The expression vector of claim 55, wherein the purified nucleic acid segment comprises at least 200 contiguous nucleotides of SEQ ID NO: 1, or its complement.
57. The expression vector of claim 56, wherein the purified nucleic acid segment comprises at least 400 contiguous nucleotides of SEQ ID NO: 1, or its complement.
58. The expression vector of claim 57, wherein the purified nucleic acid segment comprises the nucleotide sequence of SEQ ID NO: 1, or its complement.
59. The expression vector of claim 50, further defined as a viral vector.
60. The viral vector of claim 59, further defined as an adenoviral vector.
61. The expression vector of claim 50, further defined as a plasmid vector.
62. A host cell comprising an expression vector comprising a nucleic acid segment operably attached to a promoter, wherein the nucleic acid segment comprises at least 14 contiguous nucleotides of SEQ ID NO: 1, or its complement..
63. The host cell of claim 62, wherein the host cell is *E. coli* LE392
64. A kit for the detection of *B. lonestari* sp. nov. in a sample, the kit comprising:

- (a) a carrier adapted to receive a plurality of containers in close confinement therewith;
 - (b) a first container comprising a nucleic acid sequence of at least 14 contiguous nucleotides of SEQ ID NO: 1, or its complement.
65. The nucleic acid sequence of claim 64, wherein the purified nucleic acid segment comprises at least one *B. lonestari* sp. nov.-specific nucleotide selected from the group consisting of G70, G96, T141, A193, G199, G228, A231, T269, C270, T271, A273, A300, T308, G315, A376, G380, A406, G418, G423, G505, A510, G546, T572, and C603.
66. The nucleic acid sequence of claim 65, wherein the purified nucleic acid segment comprises at least 20 contiguous nucleotides of SEQ ID NO: 1, or its complement.
67. The nucleic acid sequence of claim 66, wherein the purified nucleic acid segment comprises at least 100 contiguous nucleotides of SEQ ID NO: 1, or its complement.
68. The nucleic acid sequence of claim 67, wherein the purified nucleic acid segment comprises the nucleic acid sequence of SEQ ID NO: 1.